

ABSTRACT

Print data suitable for printing or displaying an image are generated by assigning print colors after color reduction using a process that removes color reduction noise and produces clear contours in the print image. A source data capturing unit obtains source data containing image data and/or text data in plural colors. A data conversion unit converts color data for each pixel in the source data to luminance data for each pixel. A color assignment unit assigns a printable color to each pixel according to the luminance level of the converted luminance data. Source data is thus converted to luminance data, and usable colors are then assigned according to the brightness values of the image represented by the converted luminance levels.